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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,272	11/02/2001	Wayne D. Grover	LAMA118219	3533
26389	7590	09/19/2005	EXAMINER	
CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC			TRAN, PHUC H	
1420 FIFTH AVENUE			ART UNIT	
SUITE 2800			PAPER NUMBER	
SEATTLE, WA 98101-2347			2666	

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/016,272

Applicant(s)

GROVER ET AL.

Examiner

PHUC H. TRAN

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/6/04</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshida (U.S. Patent No. 6510139 B1).

- With respect to claims 1, 4, 11, 14, 21, and 24, Yoshida teaches a method of designing a telecommunications network (e.g. a method provides optical performance and configuration management to satisfy user demands), the method comprising the steps of:

A) for all working demand flows required to be routed in the telecommunications network, finding an initial topology of spans between nodes in the telecommunications network that is sufficient for routing all working demand flows, while attempting to minimize the cost of providing the spans (S401 in Fig. 4);

B) given the initial topology of spans identified in step A, finding a set of additional spans that ensures restorability of working demand flows that are required to be restored in case of failure of any span in the initial topology of spans, while attempting to minimize the cost of providing additional spans (these candidates in col. 3, lines 55-65); and

C) starting with the initial topology of spans and the additional spans identified in step B, finding a final topology of spans between nodes in the telecommunications network that attempts to minimize the total cost of the final topology of spans, while routing all working demand flows and ensuring restorability of working demand flows required to be restored in case of failure of any span in the final topology of spans (col. 3, lines 63-67; col. 4, lines 1-18).

D) implementing the final topology of spans by adding new spans to the telecommunication network (col. 1, lines 57-60).

- With respect to claims 2, 12, and 22, Yoshida also teaches in which method step B attempts to jointly optimize the addition of new spans and the routing of working demand flows (col. 1, lines 41-45).

- With respect to claims 3, 13, and 23, Yoshida further teaches in which finding the final topology of spans is subject to a constraint limiting the average nodal degree of the final topology of spans (see col. 5, lines 15-18).

- With respect to claims 5, 15, and 25, Yoshida teaches in which finding the final topology of spans is subject to a constraint limiting the hop length of any restoration path (e.g. number nodes in between for less cost).

- With respect to claims 6, 16, and 26, Yoshida teaches in which steps A, B and C are each an iterative process that comprises applying a sifter at each iteration to remove

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unreasonable solutions for the respective step (e.g. the selection of optimal rout having minimum network cost increase).

- With respect to claims 7, 17, and 27, Yoshida explicitly fails to teach in which finding the final topology of spans is subject to a constraint limiting the connectedness of the final topology of spans. However, it is inherently to understand the cost of wireless and demand capacity is not accepted to minimize the cost in the telecommunication. Therefore, the wireless is limited to the final topology of spans.

- With respect to claims 8-9, 18-19, and 28-29, Yoshida discloses the final topology of spans is a two-connected topology (e.g. links connecting between nodes).

- With respect to claims 10, 20, and 30, Yoshida teaches in which finding the final topology of spans uses an integer programming formulation (col. 4, lines 15-18).

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Di Benedetto et al. (U.S. Patent No. 6937576 B1) discloses multiple instance spanning tree protocol.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H. TRAN whose telephone number is (571) 272-3172.

The examiner can normally be reached on M-F (8-4:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuc Tran  
Assistant Examiner  
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P.t  
9/16/05



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PRIMARY EXAMINED